



NELLY HOOPER LUDBROOK
MBE, MA, PhD, DIC, FGS.

At her office at the Department of Mines and Energy, Core Library, Glenside, 1985. MESA photo no. 34475

OBITUARY

NELLY HOOPER LUDBROOK, MBE, MA, PhD, DIC, FGS

14.vi.1907 - 9.v.1995.

President of the Royal Society of South Australia Inc. 1961

An "obituary" is usually an account of a deceased person, but Nell Ludbrook deserves more than just that. She really meant something to us so you must excuse me if I depart from the kinds of ledger account statements that often follow the death of those people who leave a significant mark on our community.

I first came across the name N. H. Ludbrook when I was a student at the University of Adelaide in the late 1960s. While I was searching through the stacks in the Barr Smith Library on some aspect of the evolution of interior deserts, her name appeared a number of times in a paper dealing with geomorphology. The more I searched related papers the more her name recurred. I must confess that, then, I didn't know whether N. H. Ludbrook was male or female. All I knew was that the name was referred to in an array of papers dealing with stratigraphy, geological evolution, palaeontology, palaeoclimate, ancient glaciations and the list went on. And it didn't seem to matter what part of the Phanerozoic either. I admit I thought that a person touching so many aspects of geoscience had to be of great physical and scientific stature. It was not until twenty odd years later when I actually met her that I found I was wrong on one count but I was certainly not disappointed. What a marvellous person and an extra-ordinary scientist I found her to be.

Nell (never Nelly) was born Nelly Hooper Woods at Yorketown, Yorke Peninsula on 14 June 1907, and educated at Mount Barker High School in the Adelaide Hills. During her undergraduate studies at The University of Adelaide she became fascinated with Late Tertiary Mollusca in the St Vincent Basin, a course of study not easy at that time because palaeontology was not offered by the university. This fascination broadened to the whole Cainozoic and continued through her long career. Nell graduated as BA (1928) and MA (1930), and was awarded the Tate Medal of the University of Adelaide for a research paper on molluscs obtained from an Adelaide Plains borehole. Even during her period of teaching at Mount Barker High School, she still found time to extend her knowledge of Mollusca.

Following her marriage in 1935, she and her husband, Wallis Verco Ludbrook, moved to Canberra where, undaunted, she continued her interest in Caino-

zoic Mollusca. It was fortunate at this time that the Commonwealth Palaeontologist function was moved from Melbourne to Canberra, undoubtedly facilitating her continuing interest in palaeontology. While in Canberra, from 1942 to 1949, Nell worked as Assistant Geologist in the Commonwealth Bureau of Mineral Resources dealing with statistics of strategic minerals.

In 1950 she travelled to London. Here at Imperial College and as a visiting scientist at the British Museum (Natural History) she continued to extend her palaeontological studies. Nell was awarded her PhD in geology (1952) from the University of London and the DIC in palaeontology for research on Pliocene Mollusca from the St Vincent Basin. Out of this research developed an authoritative chapter on fossil scaphopods in the first edition of the "Treatise of Invertebrate Paleontology" (1960).



Sampling Early Cretaceous Eromanga basin sediments near Marree, 1963. Photograph by B. G. Forbes. MESA photo no. 20035.

Following the death of her husband and on returning to Australia, Nell gained the position of Technical Information Officer with the South Australian Department of Mines in 1952. At this time palaeontology was seen to have little economic value - something more esoteric than having any practical application. It was no mean feat, therefore, that Nell, having been charged with the added responsibility of demonstrating the application of micropalaeontology in stratigraphy, succeeded way beyond expectations in this role. She won the enormous respect of colleagues around her and established biostratigraphy as an important function of the Department, a role that continues today.

During the heady days of early petroleum exploration in the Cooper Basin, Nell was the key scientist in determining the age and stratigraphy of samples from deep wells drilled into unknown strata. Even the then Premier of South Australia, Thomas Playford, waited with great interest for Nell's conclusions. Actually Nell admitted to me on one occasion that she did not really know what the age of some rock samples was, so she took a "stab". As it turned out, later work, employing far more sophisticated methods, showed her determinations to be correct - such was the great range of her knowledge.

In 1957 Nell was appointed Palaeontologist with the Department of Mines, and later, Senior Palaeontologist, in which capacity she continued biostratigraphic research until her "retirement" in 1967. During this time she developed an expertise in foraminiferal biostratigraphy, essential to unravelling the stratigraphy of largely buried strata in sedimentary basins throughout the State and aiding in the search for groundwater and petroleum. She travelled into remote areas of the Eucla and Eromanga Basins with mapping and drilling parties to undertake fossil collecting and stratigraphic investigations, often camping out in the open. Nell always insisted on seeing the field relationships of the sediments and faunas she worked on. It was through her field activities that biostratigraphy became firmly recognised as an integral part of geological mapping by the Department of Mines. This work culminated in the publication of two important monographs on the Murray Basin (1961) and the Eromanga Basin (1966), still very much referred to today as are the stratigraphic units she defined during the course of her studies.

"Retirement" really meant the continuation of her love of geology and especially for fossil Mollusca. She worked as a consultant in palaeontology to the Department of Mines and Energy until 1993, at which



N. H. Ludbrook and J. Spence examining Cretaceous sediments at North West Bend, along the River Murray. Photograph by A. R. Crawford. MESA photo no. T002001.

time she had reached the age of 86. In addition to the publication of a number of research papers during this time she wrote the highly successful "Guide to the Geology and Mineral Resources of South Australia" (1980) and later the "Handbook of Quaternary Molluscs of South Australia" (1985). As a demonstration of the great respect and admiration that her colleagues from all over the world had for her, a special honour volume of papers dealing with stratigraphy and palaeontology was published by the Department of Mines and Energy in 1985. Until only a short time before her death in 1995 Nell was still researching a large volume on Tertiary Mollusca.

Although the vast number of her publications (over 70 scientific papers and monographs) and Government reports was known to me, I only became aware of the full extent of her extraordinary energies whilst I was researching material for the 1995 Volume 2 of the "Geology of South Australia". During the course of rummaging through filing cabinets in the Biostratigraphy Branch containing countless numbers of her Report Books I came across a huge number of unpublished letters and personal communications to geologists in companies, academia and government carefully outlining the results of work undertaken for them, each almost of quality to be published notes in their own right. We are now the custodians of Nell's journals, books and notebooks, donated by her in 1994 and now housed in the N. H. Ludbrook Memorial Library at Mines and Energy South Australia.

Nell's interest in geology and the influence she had on the science (and related sciences for that matter) extended far beyond the workplace. She was very active as a member and office holder in the Geological Society of Australia from its inception. She was the

founding Secretary of the South Australian Division (1953-56) and Federal Secretary (1956-59), and a Member of the Stratigraphic Nomenclature Committee, in the early days of its operation. Nell was a driving force in the preservation of key geological sites and in the promotion of geological monuments. Nell was elected Federal President of the Geological Society in 1968 and Honorary Member in 1976 - such was the high respect that the geological community held for her.

Her great energies extended into the affairs of the Royal Society of South Australia. She was elected President in 1961-62, awarded the Sir Joseph Verco Medal in 1963, the highest honour from the Society, and was Editor of the Handbooks of the Flora and Fauna of South Australia from 1967 to 1980. Nell became an Honorary Associate of the South Australian Museum in 1981. In recognition of her service to science, in 1981 Nell Ludbrook was made Member of the Most Excellent Order of the British Empire.

During her great devotion to research in palaeontology and stratigraphy and her commitment to the affairs of scientific societies Nell still found time to guide and advise colleagues in many aspects of geoscience. She travelled widely throughout the world pursuing her love of geology - into many places where European women were rarely seen. Nell had the rare gift of being able to devote herself to this pursuit and yet still maintain an enormous interest in the cultural and musical life of Adelaide and the world at large. She loved entertaining at her home at Toorak Gardens - many an overseas visitor was delighted with her hospitality.

It was an honour and a pleasure for all of us to have known Nell Ludbrook.

NEVILLE F. ALLEY